Application No.: 09/910170 Docket No.: MWS-041

REMARKS

Pending in the application are claims 1-42, of which claims 1, 8, 9, 10, 16, 24, 26, 30, 34 and 35 are independent. Applicant wishes to thank the Examiner for indicating that claims 8, 9, and 24-42 are allowed and that claims 16-23 would be allowable if rewritten or amended to overcome the rejection of under 35 U.S.C. § 112, 2nd paragraph. Applicant herein amends claims 1 and 10. The following comments address all stated grounds for rejection, and the Applicant respectfully submits that the presently pending claims, as identified above, are now in a condition for allowance.

Claim Rejections - 35 U.S.C. § 101 and §112, first paragraph

Claims 1-7 and 10-15

35 U.S.C. § 101 rejection

The Office Action rejects claims 1-7 and 10-15 under 35 U.S.C. § 101 as being directed to non-statutory subject matter, specifically, as being directed to an abstract idea. Applicant respectfully traverses the rejection to the extent is maintained against the claims as amended, for the following reasons.

Applicant herein amends claims 1 and 10 to clarify that the method is a computer implemented method. Applicant's independent claim 1 describes a computer-implemented method that identifies portions of a model that are critical to a real-time execution of the model and generates code that is capable of real-time execution based on the critical portions of the model. Applicant respectfully submits that the step of generating code recited in Applicants claim is an example of a step that results in the formation of concrete, useful, and tangible result. Further, the model recited in Applicant's claim is a not merely an abstract idea. The use of modeling to solve problems was known in the art at the time of the filing of the application. The model is also a concrete, tangible, and useful object.

Therefore, Applicant respectfully requests that the rejection of claim 1 under 35 U.S.C. §101 be reconsidered and withdrawn. Applicant also respectfully requests that the rejection of claims 2-7, which depend directly or indirectly, from allowable claim 1 be reconsidered and withdrawn.

Application No.: 09/910170

Docket No.: MWS-041

Claim 10 recites, in part, "generating software source code for the model with a code generator" The code generator produces a concrete, useful, and tangible result, namely software source code. Therefore, the invention, as claimed, falls within the province of 35 U.S.C. § 101.

In light of the above amendments and remarks, Applicant respectfully requests that the rejection of claim 10 under 35 U.S.C. § 101 be reconsidered and withdrawn. Applicant also respectfully requests that the rejection of claims 11-15, which depend directly or indirectly, from allowable claim 10 be reconsidered and withdrawn.

35 U.S.C. § 112, first paragraph rejection

The Office Action also rejects claims 1-7 and 10-15 under 35 U.S.C. § 112, first paragraph because "the claimed invention is not supported by either a technological art, environment or machine asserted utility or a well established utility" for the reason set forth in the 35 U.S.C. § 101 rejection. Applicant respectfully traverses the rejection to the extent is maintained against the claims as amended. As was discussed above, the amended claims are directed to statutory subject matter. Moreover, the specification of the present invention is enabling. In various places throughout the specification, Applicant has recited ways to use the invention as claimed. For example, at pages 13 – 16 and with reference to FIG. 3 and FIG. 4, the application lists various hardware and software platforms (e.g., CPUs, real-time operating systems, custom ASICs, hardware FPGAs) in which principles of the invention can be practiced. Further, Applicant names a commercial product that incorporates principles of the present invention, namely Real-Time Workshop that works in conjunction with Simulink. Therefore, Applicant respectfully requests that the rejection of claims 1-7 and 10-15 under 35 U.S.C. § 112, first paragraph be reconsidered and withdrawn.

Claim Rejections - 35 U.S.C. § 101 and §112, second paragraph

Claims 16-23

The Office Action rejects claims 16-23 under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which

Docket No.: MWS-041 Application No.: 09/910170

Applicant regards as the invention. The Office Action states that claim 16 recites a single means claim. Applicant respectfully traverses this rejection.

Applicant's claim 16 recites:

"[a] system comprising a graphical user interface (GUI) adapted to receive user inputs to specify components of a model, the components containing a first subset of sections designated as post-processing elements of a model and a second subset of sections designated as core elements of the model."

The claim recites a number of structural elements such as a graphical user interface, and various components of the graphical user interface, namely first and second subsets of sections. As a result, Applicant respectfully submits that claim 16 is not a single means claims.

Therefore, Applicant respectfully requests that the rejection of claim 16 under 35 U.S.C. § 112, 2nd paragraph, be reconsidered and withdrawn. Applicant also respectfully request that the rejection of claims 17-23, which depend directly or indirectly, from allowable claim 16 be reconsidered and withdrawn.

If the Examiner is of the position that claim 16 is a means-plus-function claim according to 35 U.S.C. § 112, sixth paragraph, Applicant respectfully disagrees. Applicant's claim 16 recites at least three structural elements and their interrelationships. Further, according to the M.P.E.P, a claim that a claim element that does not include the phrase "means for" will not be considered to invoke 35 U.S.C. 112, sixth paragraph." See M.P.E.P § 2181.

CONCLUSION

In view of the above, each of the presently pending claims in this application is believed to be in condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue. If, however, the Examiner considers that further obstacles to allowance of these claims persist, we invite a telephone call to Applicant's representative.

Application No.: 09/910170

Docket No.: MWS-041

Applicant believes no fee is due with this statement. However, if a fee is due, please charge our Deposit Account No. 12-0080, under Order No. MWS-041 from which the undersigned is authorized to draw.

Dated: April 19, 2005

Respectfully submitted,

Leigh . Martinson

Registration No.: 50,749

LAHIVE & COCKFIELD, LLP

28 State Street

Boston, Massachusetts 02109

(617) 227-7400

(617) 742-4214 (Fax)

Attomey/Agent For Applicant